ANCHORAGE "INFORMAL"

Federal Interagency Training Course in

Wetland Identification and Delineation

Adapted from Regulatory IV - U. S. Army Corps of Engineers, Engineer Research and Development Center (former Waterways Experiment Station)

INSTRUCTORS

CORPS OF ENGINEERS, AK DISTRICT, REGULATORY BRANCH:

Mary Lee Plumb-Mentjes, Project Manager, South Section

Hank Baij, Team Leader, South Section

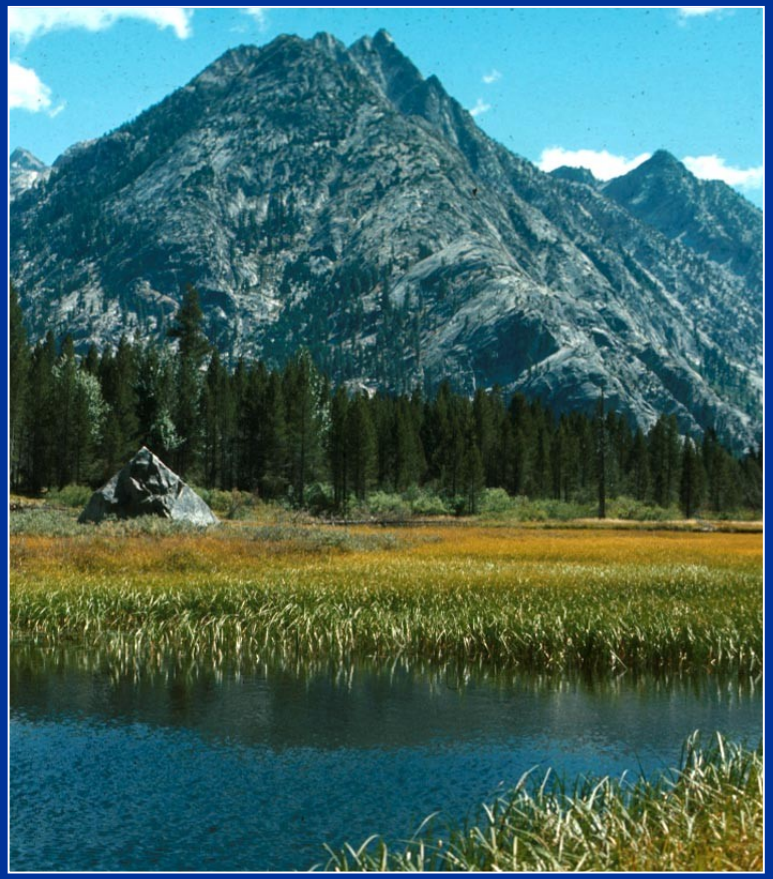
Mike Holley, Team Leader, North Section

Joe White, Project Manager, South Section

Dave D'Amore, Soil Scientist, USDA Forest Service

Introduction

- Only 5% of the lower 48 states is wetlands and other shallow aquatic habitats.
- Abundance varies by region:
  - <1% of CA, NV, AZ, NM, UT, KS, MT, and WV
  - >25% of FL and LA
  - ~45% of AK



Wetland Loss in the U.S.

Since the late 1700s, >50% of U.S. wetlands have been converted to other

Wetland Functions

Wetlands provide benefits to society out of proportion to their extent on the landscape.

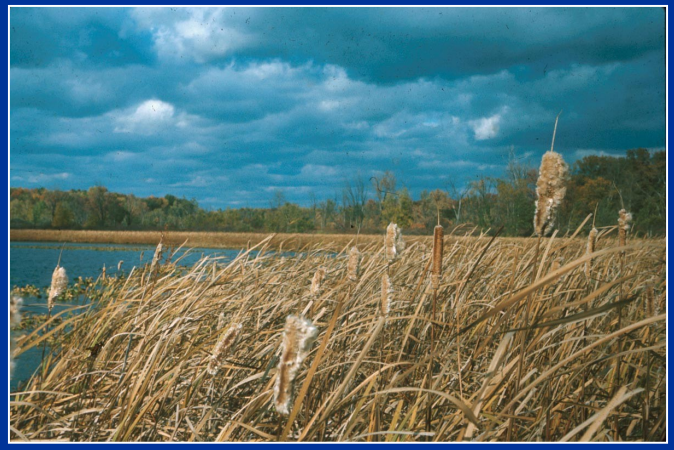
… water quality

… flood control

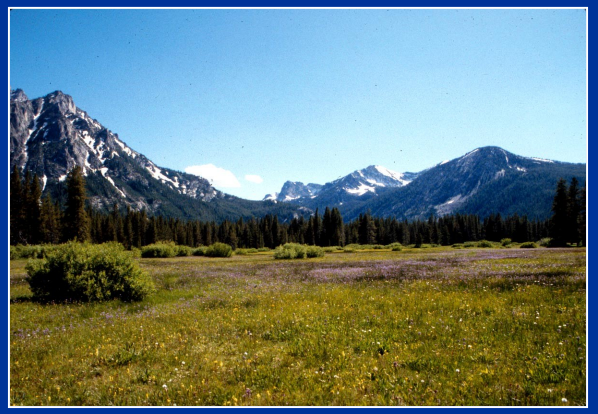
… habitat

Are these Wetlands?

Some wetlands are easy to identify . . .



Are these Wetlands?



. . . others can be difficult and controversial.

Why Delineate Wetlands?

- Help to define the limits of federal jurisdiction, in accordance with current law, regulations, and policy
- Determine the affected environment as a basis for impact assessment, alternatives analysis, and mitigation

Relevant Federal Statute

- Clean Water Act of 1972 and Amendments
  - Authorized EPA and the Corps to regulate certain activities in wetlands and other waters

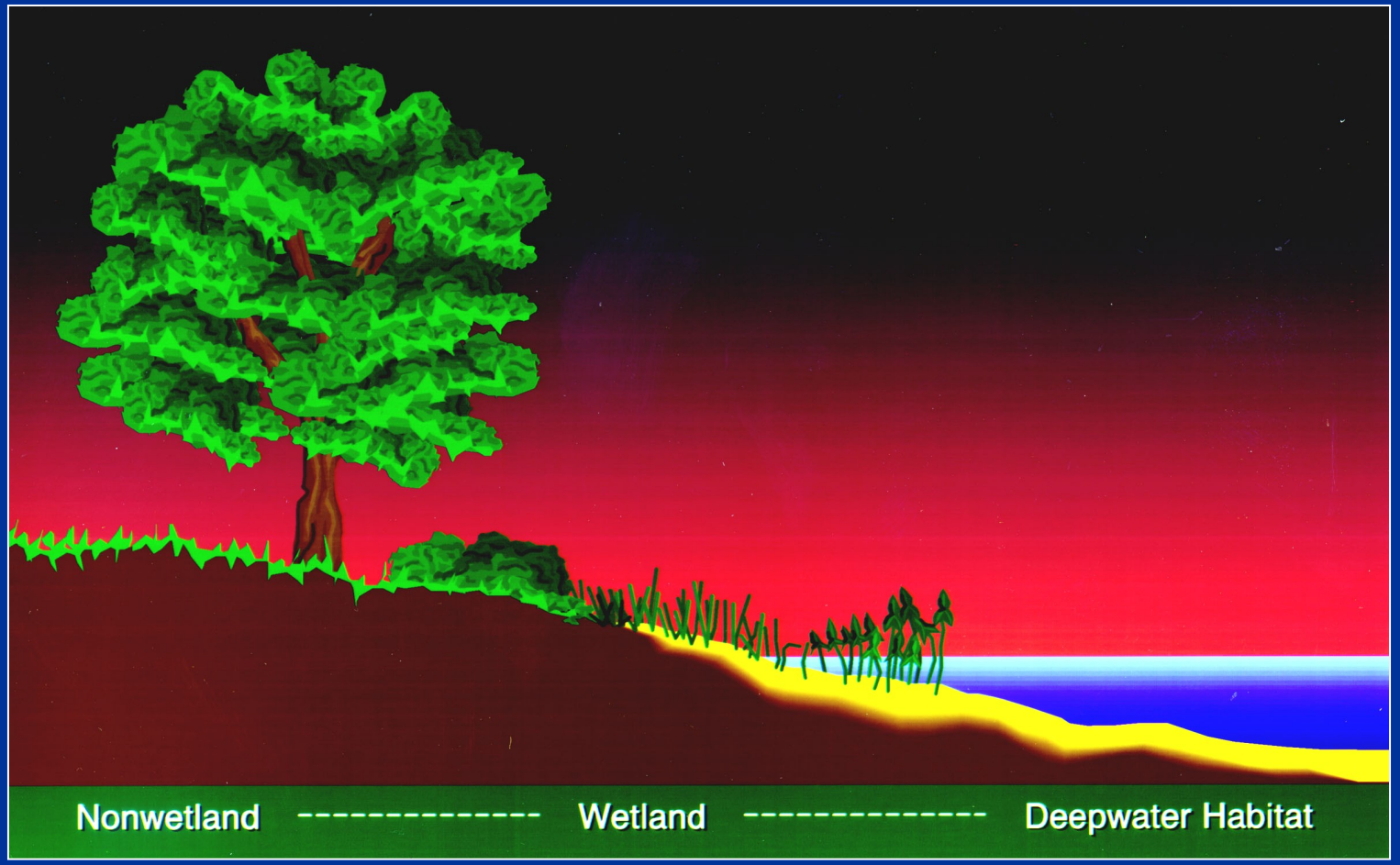
Delineation Manual

- Corps of Engineers Wetlands Delineation Manual (1987)
- Alaska Regional Supplement (2007)

Purpose

- Describe mandatory technical criteria, field indicators, and recommended methods for identifying wetlands and delineating their upper boundaries for jurisdictional purposes

Where is the Wetland?



Scope of the Clean Water Act

- Applies to all “waters of the United States” including these Special Aquatic Sites designated by EPA:
  - Wetlands
  - Sanctuaries and refuges
  - Mudflats
  - Vegetated shallows
  - Coral reefs
  - Riffle and pool complexes

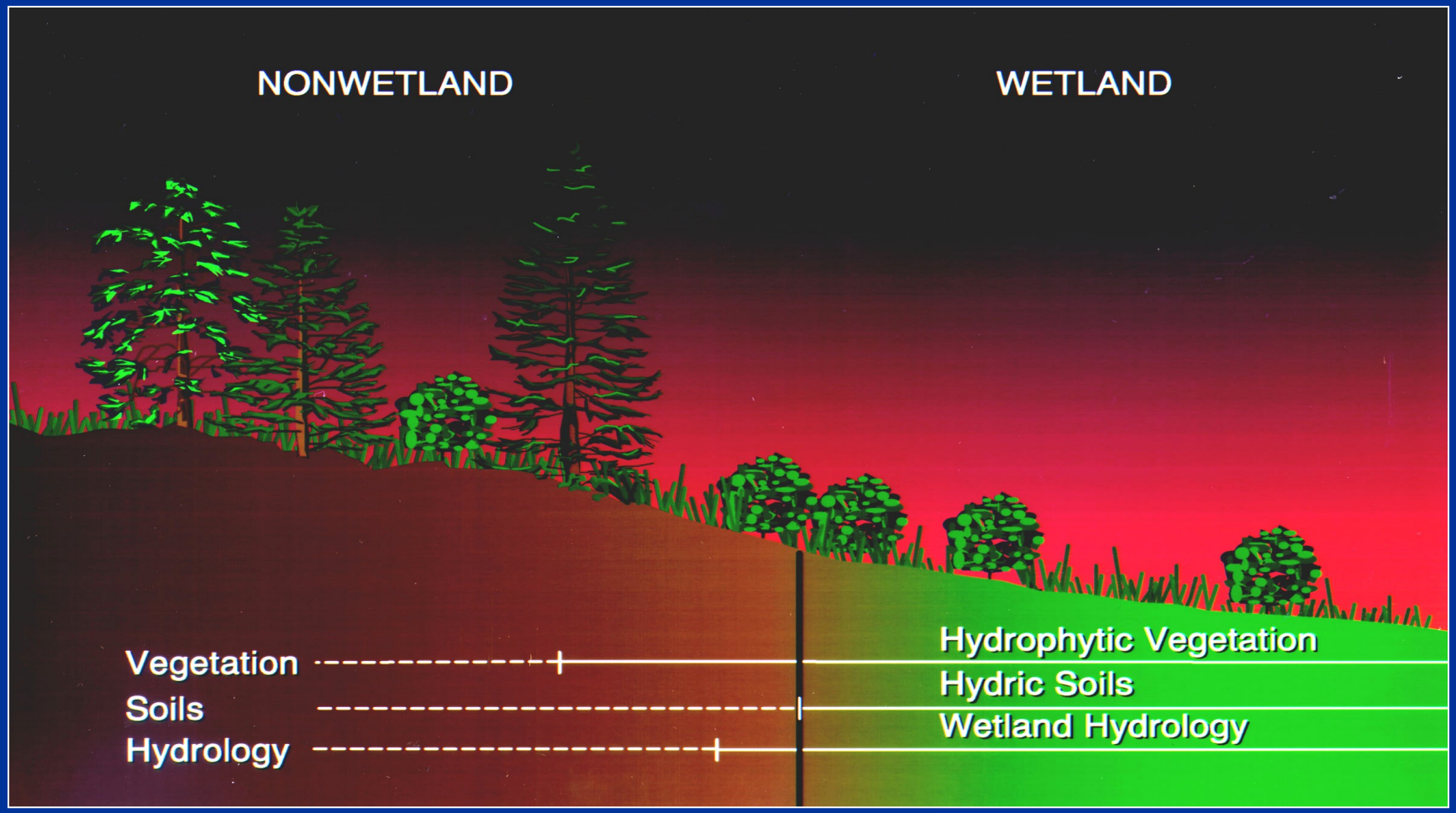
Wetland Definitions

- Corps/EPA definition - for Clean Water Act Section 404 purposes:
  - Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Diagnostic Characteristics

- Hydrophytic Vegetation
  - Dominated by species that are tolerant of prolonged inundation or soil saturation
- Hydric Soils
  - Exhibit characteristics that develop under permanent or periodic soil saturation
- Wetland Hydrology
  - Evidence of ongoing wetland conditions

The 3-Parameter Approach



Normal Circumstances

- The condition indicated by the soils and hydrology on a site, whether or not the vegetation has been altered or removed
  - Cropping or cropping history is not the normal circumstance
- The long-term condition of the site, including any permitted or other legal alterations

Wetland Definitions

- Fish and Wildlife Service definition - for National Wetlands Inventory purposes:
  - Lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water.
    - Includes unvegetated wet areas (e.g., beaches, mud flats, gravel streambeds, shallow ponds) that are not considered wetlands under other definitions
    - These areas may be regulated as other "waters of the United States" under the Clean Water Act

Course Objectives

- Present technical criteria for hydrophytic vegetation, hydric soils, and wetland hydrology
- Describe field indicators
- Describe methods for delineating wetlands, including disturbed and problem sites
- Provide supporting information

Flexibility

Wetland delineations must be based on the best available data, tempered with experience and professional judgement.

Do not become a “Manual Zombie”! This is not a cookbook approach….

Information Sources on the Web

- Corps of Engineers Wetlands Delineation Manual
  - http://www.wes.army.mil/el/wetlands/wetlands.html#wrtc

Sources

- Corps Headquarters, Regulatory Program
  - http://www.usace.army.mil/inet/functions/cw/cecwo/reg/
- EPA Office of Water
  - http://www.epa.gov/owow/wetlands/
- USDA Natural Resources Conservation Service
  - http://www.nrcs.usda.gov/